

Energy Development & Air Quality

Statewide BLM Colorado Resource Advisory Council

March 7, 20112

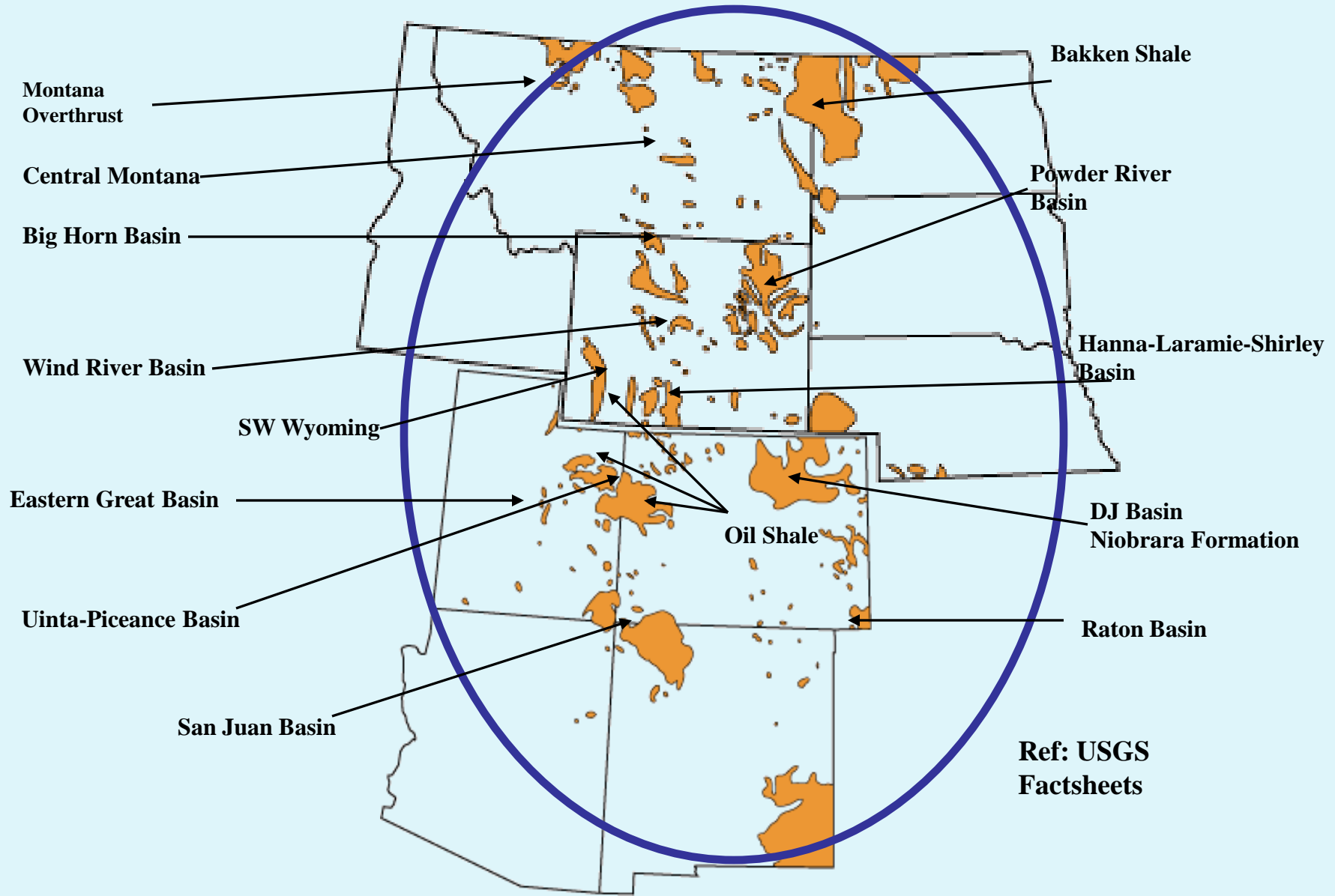
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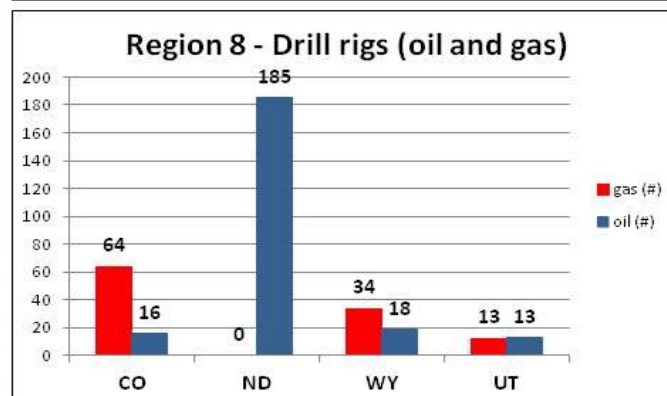
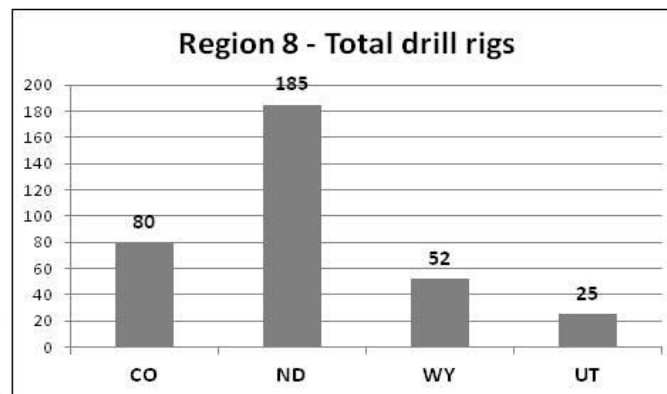
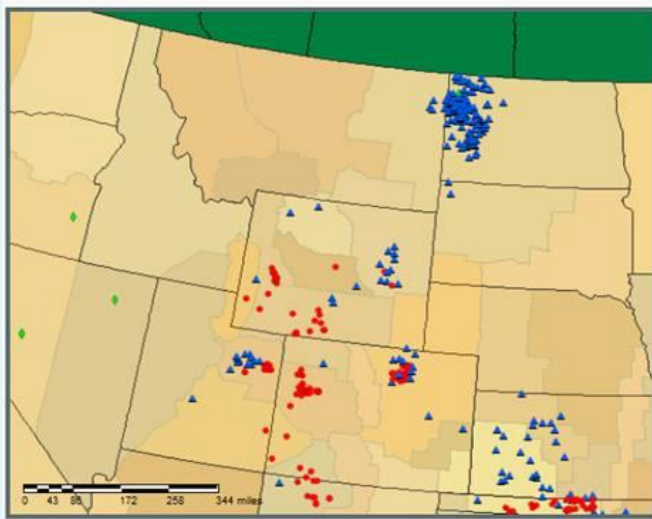
Region 8 Oil and Gas Producing Areas



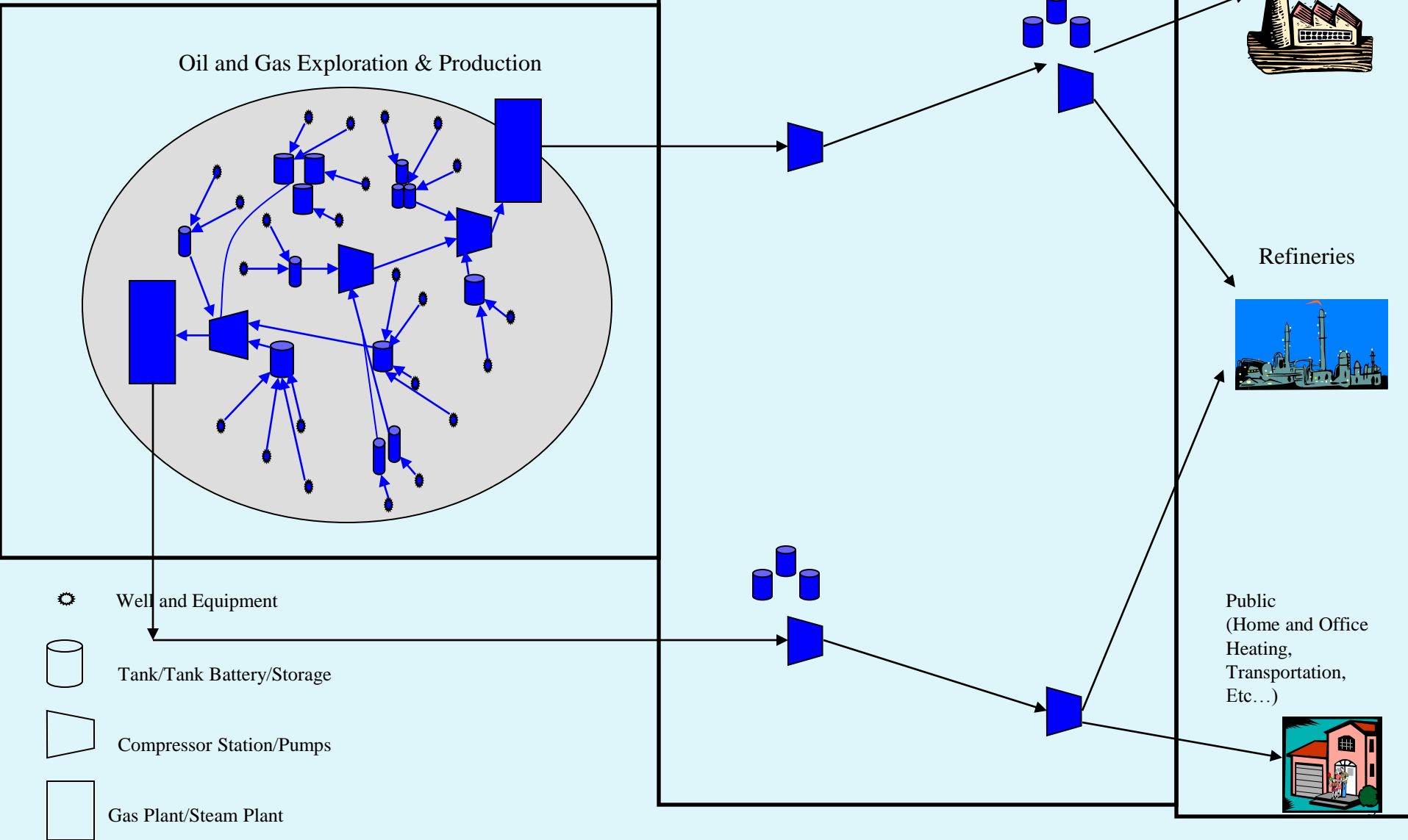
Noteworthy Development Trends

Region 8 Rig Count (9/20/11)

State	gas	oil	rigs (#)	% of U.S.
CO	80%	20%	80	4%
ND	0%	100%	185	9%
WY	65%	35%	52	3%
UT	50%	50%	25	1%
R8 total			342	17%
UStotal			1,985	



Basic Schematic of O&G Operations



Oil and Gas Air Emissions Sources

▶ **VOC and HAP Emissions:**

- Flash emissions from storage tanks, waste water treatment, heater-theaters, dehydrators, etc.....
- Emissions from the casing annulus of the wells
- Equipment leaks and fugitive emissions (potentially any production and/or processing equipment)

▶ **NO_x, CO, SO_x emissions:**

- Combustion equipment
- Drilling equipment

▶ **Particulate Matter emissions:**

- Fugitive dust (road traffic, construction)
- Combustion Equipment
- Drilling operations

▶ **Cumulative Air Impacts**

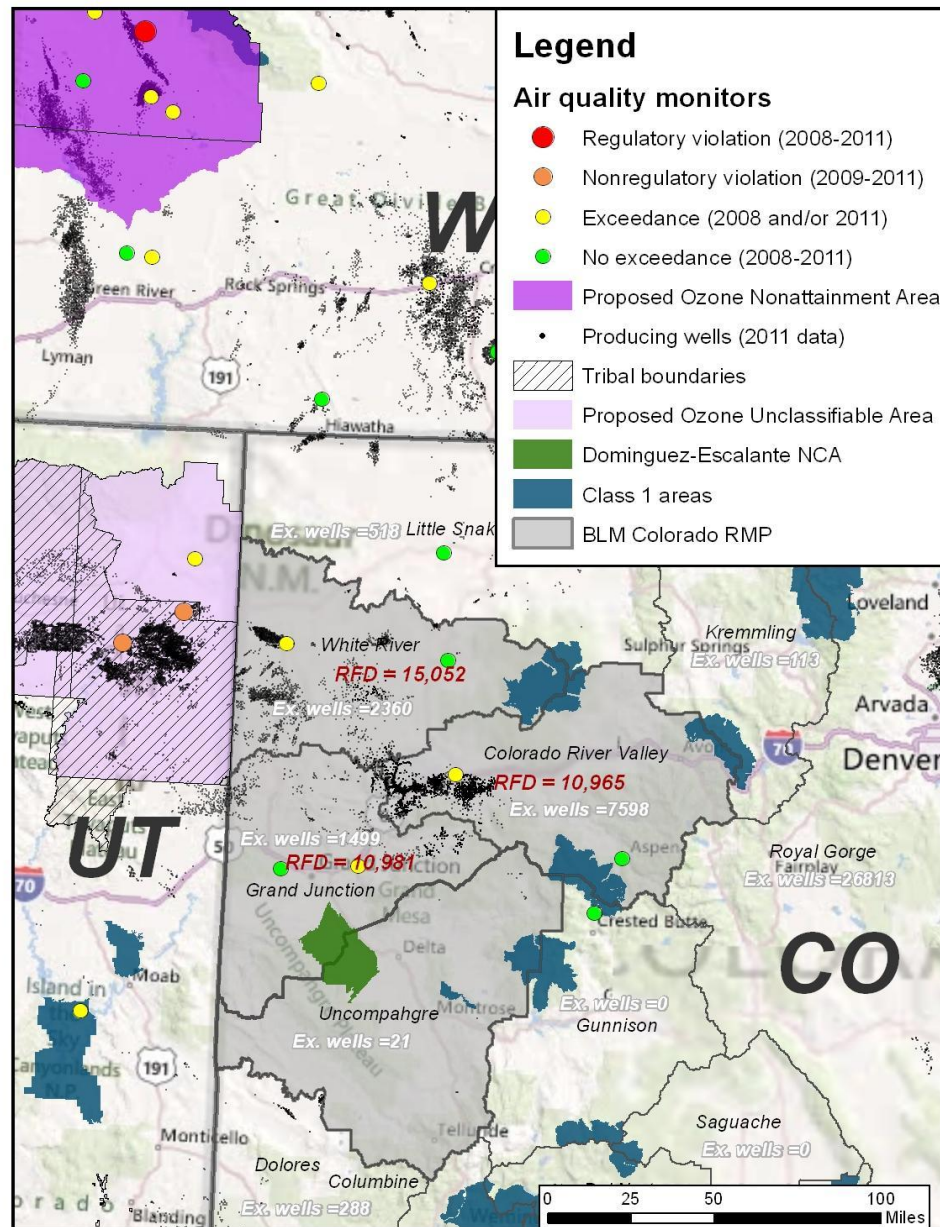
- Public health
- Class I areas
- Endangered and protected species
- Water, Soils, Vegetation

What Pollutants are Regulated?

- Public Health Based Standards (NAAQS)
 - Sulfur Dioxide (SO₂)
 - Nitrogen Oxides (NO_x)
 - Carbon Monoxide (CO)
 - Particulate Matter (PM)
 - Ground-level Ozone (O₃) as Volatile Organic Compounds (VOC) & NO_x
 - Lead (Pb)
- Hazardous Air Pollutants (HAPs)
 - 188 pollutants identified in Section 112 of the Clean Air Act
 - Over 120 categories of industry regulated

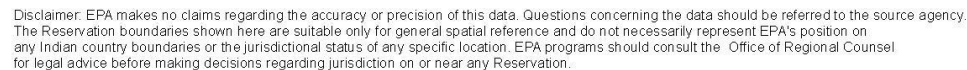
Western Colorado BLM RMPs - Ozone

Current Emphasis



Disclaimer: EPA makes no claims regarding the accuracy or precision of this data. Questions concerning the data should be referred to the source agency. The Reservation boundaries shown here are suitable only for general spatial reference and do not necessarily represent EPA's position on any Indian country boundaries or the jurisdictional status of any specific location. EPA programs should consult the Office of Regional Counsel for legal advice before making decisions regarding jurisdiction on or near any Reservation.

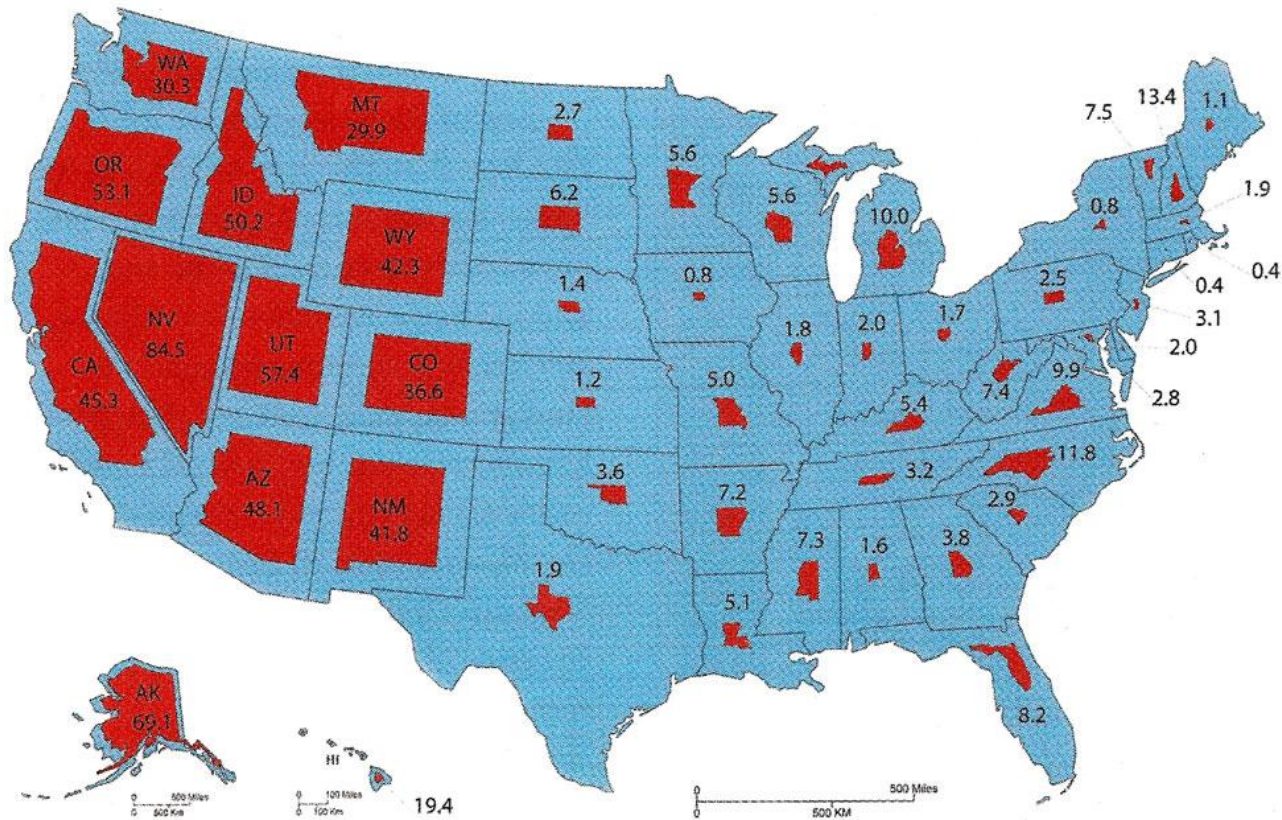
Current Emphasis



Why It Matters: NEPA

WHO OWNS THE WEST?

Federal Land as a Percentage of Total State Land Area



Data source: U.S. General Services Administration, *Federal Real Property Profile 2004*, excludes trust properties.

Program Updates

▶ NEPA

- Sheer volume of Actions in the Region
 - Oil and Gas (RMPs and Project NEPA): **30**
 - Uranium: **3**
 - Oil Shale: **1**
 - MOU

▶ Colorado:

- White River
- Colorado River Valley
- Kremmling

Program Updates

▶ Air Quality

- Tribal Activities
 - Tribal NSR
 - Southern Ute Title V Program Approval
 - Major Source Permitting : PSD and Title
- Winter Ozone Study
- New Ozone Standard Guidance and Voluntary Reductions
- Federal Oil and Gas NSPS/NESHAPS

Why It Matters: Winter Ozone

